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FIGURE 1 A

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Lc743	I	T	G	K	V	C	G	S	E	D	C	L	Y	L	S	V	Y	T	N	N	120
RM8con	
301	360	
Lc743	ATAACGGGCAAAGTGTGTGGCTCAGAGGATTGTCTATACCTAACGTGTCTATACGAATAAT																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
Lc743	L	N	P	E	T	K	R	P	V	L	V	Y	I	H	G	G	G	F	I	I	140
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
361	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	420
Lc743	CTAAATCCGAAACTAAACGTCCCCTTTAGTATACATACATGGTGGTGGTTTATTATC																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
Lc743	G	E	N	H	R	D	M	Y	G	P	D	Y	F	I	K	K	D	V	V	L	160
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
421	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	480
Lc743	GGTAAAATCATCGTATATGTATGGCCTGATTATTCATTTAAAGGATGTGGTGTG																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
Lc743	I	N	I	Q	Y	R	L	G	A	L	G	F	L	S	L	N	S	E	D	L	180
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
481	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	540
Lc743	ATTAACATACAATATCGTTGGGAGCTCTAGGTTCTAAGTTAAATTCAAGAACCTT																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
Lc743	N	V	P	G	N	A	G	L	K	D	Q	V	M	A	L	R	W	I	K	N	200
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
541	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	600
Lc743	AATGTGCCGGTAATGCCGGCTTAAAGATCAAGTCATGGCCTTGCCTGGATTAAAAAT																				
RM8A																				
RM8B																				
RM8CA.....																				
RM8con																				

Figure 1 ~~continued~~

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Lc743	N	C	A	N	F	G	G	N	P	D	N	I	T	V	F	G	E	S	A	G	220
RM8con
601	660
Lc743	AATTGCGCCAACCTTGGTGGCAATCCCGATAATATTACAGTCTTGGTCAAAGTGCCGGT																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	A	A	S	T	H	Y	M	M	L	T	E	Q	T	R	G	L	F	H	R	G	240
RM8con
661	720
Lc743	GCTGCCTCTACCCACTACATGATGTTAACCGAACAAACTCGCGGTCTTCCATCGTGGT																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	I	L	M	S	G	N	A	I	C	P	W	A	N	T	Q	C	Q	H	R	A	260
RM8con	L
721	780
Lc743	ATACTAATGTCGGTAATGCTATTGTCATGGGCTAACCAATGTCAACATCGTGCC																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	F	T	L	A	K	L	A	G	Y	K	G	E	D	N	D	K	D	V	L	E	280
RM8con
781	840
Lc743	TTCACCTTAGCCAAATTGGCCGGCTATAAGGGTGAGGATAATGATAAGGATGTTGGAA																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	F	L	M	K	A	K	P	Q	D	L	I	K	L	E	E	K	V	L	T	L	300
RM8con
841	900
Lc743	TTTCTTATGAAAGCCAAGCCACAGGATTAATAAAACTGAGGAAAAAGTTTAACCTCA																				
RM8A																				
RM8B																				
RM8C																				
RM8con																				

Figure 1 continued

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Lc743	E	E	R	T	N	K	V	M	F	P	F	G	P	T	V	E	P	Y	Q	T	320
RM8con
901	960
Lc743	GAAGAGCGTACAAATAAGGTATGTTCTTTGGTCCACTGTTGAGCCATATCAGACC																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	A	D	C	V	L	P	K	H	P	R	E	M	V	K	T	A	W	G	N	S	340
RM8con
961	1020
Lc743	GCTGATTGTGTCTTACCCAAACATCCTCGGGAAATGGTTAAACTGCTTGGGTAATTG																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	I	P	T	M	M	G	N	T	S	Y	E	G	L	F	F	T	S	I	L	K	360
RM8con
1021	1080
Lc743	ATACCCACTATGATGGGTAACACTTCATATGAGGGTCTATTTTCACTTCAATTCTAAG																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	Q	M	P	M	L	V	K	E	L	E	T	C	V	N	F	V	P	S	E	L	380
RM8con
1081	1140
Lc743	CAAATGCCTATGCTTGTAAAGGAATTGAAACTTGTGTCAATTGTGCCAAGTGAATTG																				
RM8A	.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			
 Lc743	A	D	A	E	R	T	A	P	E	T	L	E	M	G	A	K	I	K	K	A	400
RM8con
1141	1200
Lc743	GCTGATGCTAACCGACCGCCCCAGAGACCTTGGAAATGGTGCTAAAATTAAAAAGGCT																				
RM8A	.....T.....																			
RM8B	.....																			
RM8C	.....																			
RM8con	.....																			

Figure 1 continued

Lc743	H	V	T	G	E	T	P	T	A	D	N	F	M	D	L	C	S	H	I	Y	420
RM8con
1201	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+1260
Lc743	CATGTTACAGGAGAACACCAACAGCTGATAATTTATGGATCTTGCTCTCACATCTAT																				
RM8A	
RM8B	
RM8C	
RM8con	
Lc743	F	W	F	P	M	H	R	L	L	Q	L	R	F	N	H	T	S	G	T	P	440
RM8con	
1261	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+1320
Lc743	TTCTGGTTCCCCATGCATCGTTGCAATTACGTTCAATCACACCTCCGGTACACCC																				
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	V	Y	L	Y	R	F	D	F	D	S	E	D	L	I	N	P	Y	R	I	M	460
RM8con	
1321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+1380
Lc743	GTCTACTTGTATCGCTTCGACTTTGATTGGAAAGATCTTATTAAATCCCTATCGTATTATG																				
RM8A	.	.	.	.	.	.	.	.	.	C	.	.	.	C	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	C	.	.	.	C	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	C	.	.	.	C	.	.	.	.	.
RM8con	.	.	.	.	.	.	.	.	.	C	.	.	.	C	.	.	.	.	.
Lc743	R	S	G	R	G	V	K	G	V	S	H	A	D	E	L	T	Y	F	F	W	480
RM8con	
1381	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+1440
Lc743	CGTAGTGGACGTGGTGTAAAGGGTGTAGTCATGCTGATGAATTACCTATTCTCTGG																				
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	N	Q	L	A	K	R	M	P	K	E	S	R	E	Y	K	T	I	E	R	M	500
RM8con	
1441	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+1500
Lc743	AATCAATTGGCCAAACGTATGCCTAAAGAATCGCGTGAATACAAAACAATTGAACGTATG																				
RM8A		
RM8B		
RM8C		
RM8con		

Figure 1 continued

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Lc743	T	G	I	W	I	Q	F	A	T	T	G	N	P	Y	S	N	E	I	E	G	520
RM8con
1501	-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+1560																				
Lc743	ACTGGTATATGGATACAATTGCCACCACTGGTAATCCTTATAGCAATGAAATTGAAGGT																				
RM8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8con	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lc743	M	E	N	V	S	W	D	P	I	K	K	S	D	E	V	Y	K	C	L	N	540
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1561	-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+1620																				
Lc743	ATGGAAAATGTTCTGGGATCCAATTAGAAATCCGACGAAGTATACAAGTGTGTTGAAT																				
RM8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8con	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lc743	I	S	D	E	L	K	M	I	D	V	P	E	M	D	K	I	K	Q	W	E	560
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1621	-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+1680																				
Lc743	ATTAGTGACGAATTGAAAATGATTGATGTGCCTGAAATGGATAAGATTAAACAATGGAA																				
RM8A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RM8con	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lc743	S	M	F	E	K	H	R	D	L	F	*										570
RM8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1681	-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+1713																				
Lc743	TCGAT <u>GTTGAAAAACATAGAGATTATTTAG</u>																				
RM8A
RM8B
RM8C
RM8con

F
Figure 1 continued

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Figure 2.

Figure 3A

Seq. ID No: 14

```

ATGACTTTCTGAAGCAATTATTCGCCTGAAACTATGCTTAAATGCATGGTCAAT
1 -----+-----+-----+-----+-----+-----+ 60
TACTGAAAAGACTTCGTTAAGTATAAAGCGGACTTGATACGAAATTACGTACAGTTA

```

Seq. ID No: 13

```

M T F L K Q F I F R L K L C F K C M V N -
AAATACACAAACTACCGTCTGAGTACAAATGAAACCCAAATAATCGATACTGAATATGGA
61 -----+-----+-----+-----+-----+-----+-----+ 120
TTTATGTGTTGATGGCAGACTCATGTTACTTGGTTATTAGCTATGACTTACCT
K Y T N Y R L S T N E T Q I I D T E Y G -
CAAATTAAGGGTGTAAAGCGAATGACCGTCTACGATGATTCTTACTACAGTTGAGAGT
121 -----+-----+-----+-----+-----+-----+-----+ 180
GTTTAATTCCCACAATTGCTTACTGGCAGATGCTACTAAGAATGATGTCAGCTCTCA
Q I K G V K R M T V Y D D S Y Y S F E S -
ATACCCTATGCTAAGCCTCCAGTGGGTGAGTTGAGATTCAAGGCACCCAGCGGCCTGTA
181 -----+-----+-----+-----+-----+-----+-----+ 240
TATGGGATACGATTGGAGGTCAACCACTCAACTCTAAGTCCGTGGGTGCGCCGGACAT
I P Y A K P P V G E L R F K A P Q R P V -
CCATGGGAGGGTGTACGTGATTGCTGGGCCAGCCAACAGATCGGTACAGACAGATTTC
241 -----+-----+-----+-----+-----+-----+-----+ 300
GGTACCCCTCCACATGCACAAACGACACCCGGTCGGTTGTCTAGCCATGTCTGTCTAAAG
P W E G V R D C C G P A N R S V Q T D F -
ATAAGTGGCAAACCCACAGGTTGGAGGATTGTCTATACCTGAATGTATACCAATGAC
301 -----+-----+-----+-----+-----+-----+-----+ 360
TATTCAACGGTGGGTGTCCAAGCCTCTAACAGATATGGACTACACATATGGTTACTG
I S G K P T G S E D C L Y L N V Y T N D -
TTGAACCCAGACAAAAGGCGTCTGTATGGTTTATCCATGGCGGAGATTTATTTTC
361 -----+-----+-----+-----+-----+-----+-----+ 420
AACTTGGGTCTGTTTCCGCAGGACAATACCAAAAGTAGGTACCGCCTCTAAAATAAAAG
L N P D K R R P V M V F I H G G D F I F -
GGCGAAGCAAATCGTAACGGTTGGTCCCGACTACTTATGAAGAAACCCGTGGCTTG
421 -----+-----+-----+-----+-----+-----+-----+ 480
CCGCTTCGTTAGCATTGACCAAAACCAAGGGCTGATGAAATACTTCTTGGGCACCAAGAAC
G E A N R N W F G P D Y F M K K P V V L -

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GTAACCGTGCAATATCGTTGGGTGTGGGTTCCCTAGCCTGAAATCGGAAAATCTC
 481 -----+-----+-----+-----+-----+-----+-----+ 540
 CATTGGCACGTTATAGCAAACCCACACAACCAAAGGAATCGGACTTAGCCTTTAGAG

 V T V Q Y R L G V L G F L S L K S E N L -

 AATGTCCCCGGCAACGCTGGCCTCAAGGATCAAGTAATGGCCTTGAGATGGGTCAAGAGT
 541 -----+-----+-----+-----+-----+-----+-----+ 600
 TTACAGGGGCCGTTGCGACCGGAGTTCTAGTTATTACCGGAACTCTACCCAGTTCTCA

 N V P G N A G L K D Q V M A L R W V K S -

 AATATTGCCATTTGGTGGCGATGTAGACAATATTACCGTCTCGGCCAAAGTGCTGGT
 601 -----+-----+-----+-----+-----+-----+-----+ 660
 TTATAACGGTAAAAGCCACCGTACATCTGTTATAATGGCAGAACGCCCTTCACGACCA

 N I A I F G G D V D N I T V F G E S A G -

 GGGGCCTCAACCCATTACATGATGATAACCGAACAGACCCGTGGTTATTCCATCGTGGT
 661 -----+-----+-----+-----+-----+-----+-----+ 720
 CCCCGGAGTTGGTAATGTACTACTATTGGCTTGTCTGGCACCAAATAAGGTAGCACCA

 G A S T H Y M M I T E Q T R G L F H R G -

 ATCATGATGTCCGGTAATTCCATGTGCTCATGGGCCTCTACAGAATGCCAAAGTCGTGCG
 721 -----+-----+-----+-----+-----+-----+-----+ 780
 TAGTACTACAGGCCATTAAGGTACACGAGTACCCGGAGATGCTTACGGTTTCAGCACGC

 I M M S G N S M C S W A S T E C Q S R A -

 CTCACCATGGCAAACGTGTTGGCTATAAGGGAGAGGACAATGAAAAGATATCCTGGAA
 781 -----+-----+-----+-----+-----+-----+-----+ 840
 GAGTGGTACCGGTTGGCACAAACCGATATTCCCTCTCCTGTTACTTTCTATAGGACCTT

 L T M A K R V G Y K G E D N E K D I L E -

 TTCCTAATGAAAGCCAATCCCTATGATTGATCAAAGAGGGAGCCACAAGTTTGACACCC
 841 -----+-----+-----+-----+-----+-----+-----+ 900
 AAGGATTACTTCGGTTAGGGATACTAAACTAGTTCTCGGTGTTCAAAACTGTGGG

 F L M K A N P Y D L I K E E P Q V L T P -

 GAAAGAATGCAAATAAGGTATGTTCTTTGGACCCACTGTAGAACCATACCAAGACA
 901 -----+-----+-----+-----+-----+-----+-----+ 960
 CTTTCTTACGTTTATTCCAGTACAAAGGAAACCTGGGTGACATCTGGTATGGTCTGT

 E R M Q N K V M F P F G P T V E P Y Q T -

 GCCGACTGTGGTACCCAAACCAATCAGAGAAATGGTGAAGAGCGCTGGGAAATTG
 961 -----+-----+-----+-----+-----+-----+-----+ 1020
 CGGCTGACACACCATGGTTGGTAGTCTCTTACCACTCTCGCGAACCCCTTAAGC

A D C V V P K P I R E M V K S A W G N S -

B

Figure 3 ~~continued~~

SUBSTITUTE SHEET (RULE 26)

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ATACCCACATTGATAGGCAATACCTCCTACGAAGGTTGCTTCAAATCAATTGCCAA
 1021 -----+-----+-----+-----+-----+-----+ 1080
 TATGGGTGTAACTATCCGTTATGGAGGATGCTTCAAACGAAAGGTTAGTTAACGGTT
 I P T L I G N T S Y E G L L S K S I A K -
 CAATATCCGGAGGTTGTAAGAGTTGGAATCCTGTGTGAATTATGTGCCCTGGAGTTG
 1081 -----+-----+-----+-----+-----+-----+ 1140
 GTTATAGGCCTCCAACATTTCTAACCTTAGGACACACTTAATACACCGAACCTCAAC
 Q Y P E V V K E L E S C V N Y V P W E L -
 GCTGACAGTGAACCGAGTGCCTCGGAAACCCCTGGAGAGGGCTGCCATTGTAAAAAGGCC
 1141 -----+-----+-----+-----+-----+-----+-----+ 1200
 CGACTGTCACTTGCGTCACGGGGCTTGGACCTCTCCGACGGTAACACTTTCCGG
 A D S E R S A P E T L E R A A I V K K A -
 CATGTGGATGGGAAACACCTACTCTGGATAATTATGGAGCTTGCTCCTATTCTAT
 1201 -----+-----+-----+-----+-----+-----+-----+ 1260
 GTACACCTACCCCTTGTGGATGAGACCTATTAAAATACCTCGAACGAGGATAAGATA
 H V D G E T P T L D N F M E L C S Y F Y -
 TTCCTCTTCCCCATGCATCGCTTCTACAATTGCCCTCAACCACAGCTGGCACTCCC
 1261 -----+-----+-----+-----+-----+-----+-----+ 1320
 AAGGAGAAGGGGTACGTAGCGAAGGATTTAACCGAAGTTGGTGTGCGACCGTGAGGG
 F L F P M H R F L Q L R F N H T A G T P -
 ATTTATTTGTATCGTTCGATTCGATCCGAAGAAATTATTAACCCCTATCGTATTATG
 1321 -----+-----+-----+-----+-----+-----+-----+ 1380
 TAAATAAACATAGCAAAGCTAAAGCTAAGGCTTCTTAATAATTGGGATAGCATAATAC
 I Y L Y R F D F D S E E I I N P Y R I M -
 CGTTTGGCGTGGCGTTAAAGGTGTAAGCCATGCCGATGAGCTAACCTATCTCTGG
 1381 -----+-----+-----+-----+-----+-----+-----+ 1440
 GCAAAACCGGCACCGCAATTCCACATTGGTACGGTACTCGATTGGATAGAGAACCC
 R F G R G V K G V S H A D E L T Y L F W -
 AACATTTGTCGAAACGCCCTGCCAAAGGAAAGCCCGAATACAAACATTGAACGCATG
 1441 -----+-----+-----+-----+-----+-----+-----+ 1500
 TTGTAAAACAGCTTGGGACGGTTCTTCGGCGTTATGTTTGGTAACTTGCGTAC
 N I L S K R L P K E S R E Y K T I E R M -
 GTTGGCATTGGACGGAATTGCCACCCGGAAACCATACAGCAATGATATAGCCGGC
 1501 -----+-----+-----+-----+-----+-----+-----+ 1560
 CAACCGTAAACCTGCCTTAAGCGGTGGCGTTGGTATGCGTTACTATACGGCCG
 V G I W T E F A T T G K P Y S N D I A G -

Figure 3 continued

SUBSTITUTE SHEET (RULE 26)

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ATGGAAAACCTCACCTGGGATCCCATAAAAAATCCGATGATGTCTATAATGTTAAAT
1561 -----+-----+-----+-----+-----+-----+ 1620
TACCTTTGGAGTGGACCCTAGGGTATTTTTAGGCTACTACAGATATTAACAAATT
M E N L T W D P I K K S D D D V Y K C L N -
ATCGGCGATGAATTGAAAGTTATGGATTTGCCAGAAATGGATAAAATAAACAATGGCA
1621 -----+-----+-----+-----+-----+-----+ 1680
TAGCCGCTACTTAACCTTCAATACTAAACGGTCTTACCTATTTAATTGTTACCCGT
I G D E L K V M D L P E M D K I K Q W A -
AGTATATTGATAAAAAGAAGGAATTGTT
1681 -----+-----+-----+ 1710
TCATATAAGCTATTTCTCCTAACAAA
S I F D K K E L F

Figure 3 *continued*

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Figure 4.